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Electrical level 2 pre-enrolment assignment

To complete this assignment, you may use any relevant sources of information, this includes the internet and or discussions with family and friends. However, the work you hand in must be your own.

You are employed as an electrical apprentice on a large construction site building new houses. You work alongside a qualified and experienced electrician, who in turn reports to an electrical supervisor.

You are 17 years old in the first year of your apprenticeship.

The site is run to strict health & safety rules and employs a full-time health & safety officer.

Task 1

Q1. What PPE do you think you will have to wear whilst walking around site?

Q2. What do you think will happen if you are caught by the health & safety officer not wearing your PPE?

Q3a. What voltage power tools does the HSE recommend is used on construction sites?

Q3b. How would this voltage be identified using sight?

Q4. A plumber wants to site a radiator in the same position that your plans state a double socket outlet is to be situated, how would you resolve this issue?
Q5. You are a witness to a near miss accident that could have resulted in a serious injury to someone you dislike. What should you do about this?
Q6a. You are tasked to run an equipotential bonding conductor to the incoming gas and water supplies. What colour cable would you use?
Q6b. What would be the minimum size of cable you would use?
Q7a. What size protective device (MCB) would you use to protect a lighting circuit you have just installed?
Q7b why use this size of protective device?
Q8. State how with the aid of a diagram how an RCD (Residual Current Device) works?

Q9. Re-arrange the equation $E=B\times L\times V$ to make L the subject? You must show all workings out.
Q10. Draw and label a wiring diagram to show how a lighting circuit (one light and one switch) is wired in a domestic property?

Q11. What would your minimum wage be?

Q12. How many hours per week can you work?

Task 2

In around 500 words

Explain your understanding of electrical installation in a domestic setting, a commercial setting and an industrial setting. You need to include what you think a qualified electrician's duties and responsibilities would be in each case.

Task 3

In around 500 words

Describe what you think the level 2 City & Guilds diploma in electrical Installation (2365) course will consist of and what you hope to achieve from it.

